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SEDIMENT DATA FROM SHORT CORES TAKEN IN THE NORTHWEST ATLANTIC --ETC(U).
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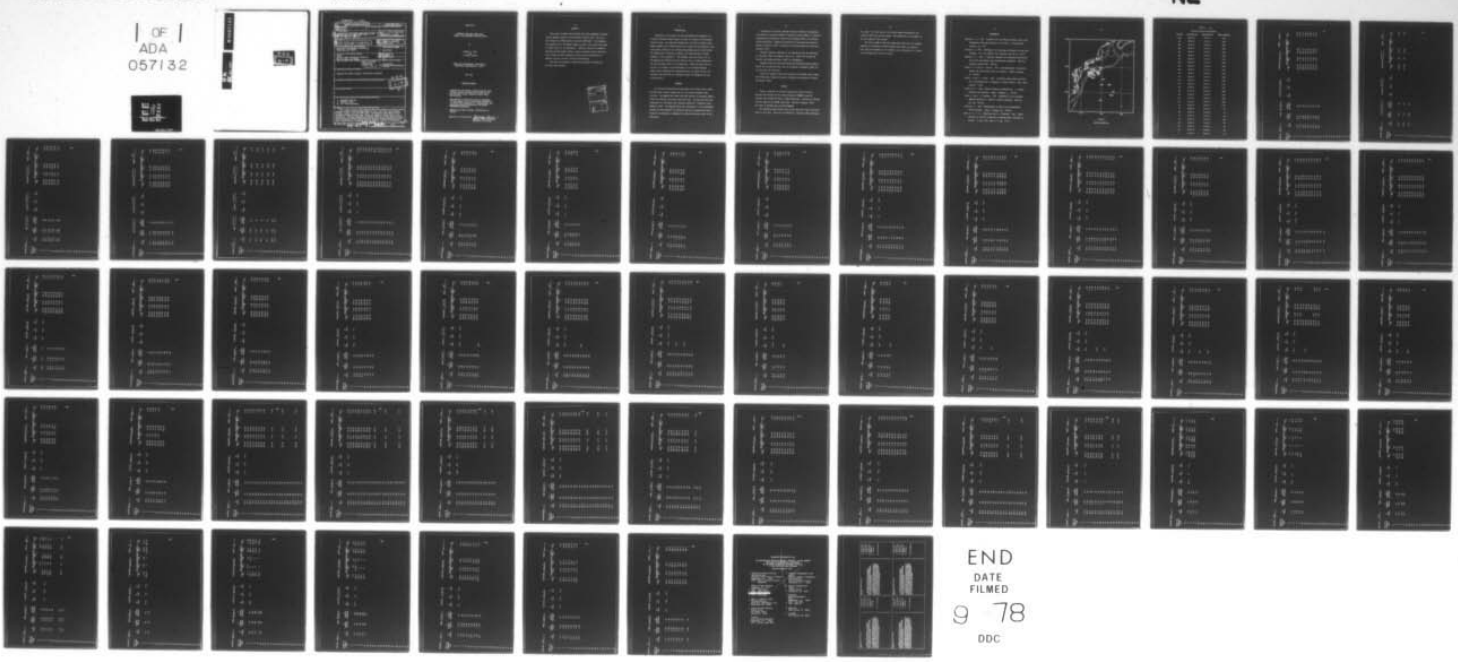

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This report presents data obtained from cored sediments collected during numerous cruises in the Northwest Atlantic area. The cores were obtained by SCUBA, gravity cores and DSRV ALVIN. The sediments were sampled with 6 centimeter diameter plastic core liners and ranged in length from 9 to 63 centimeters. Analyses conducted on sediment material include organic carbon, organic nitrogen, percent sand-silt-clay, percent calcium carbonate and pore water concentrations of ammonia, nitrite, nitrate, silicate and phosphate.

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SEDIMENT DATA FROM SHORT CORES TAKEN IN THE NORTHWEST ATLANTIC OCEAN

by

Gilbert T. Rowe
and
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WOODS HOLE OCEANOGRAPHIC INSTITUTION
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May 1978

TECHNICAL REPORT

Prepared for the Office of Naval Research under Contract N00014-74-C-0262; NR 083-004 and for the National Science Foundation under Grant OCE 76-21878.

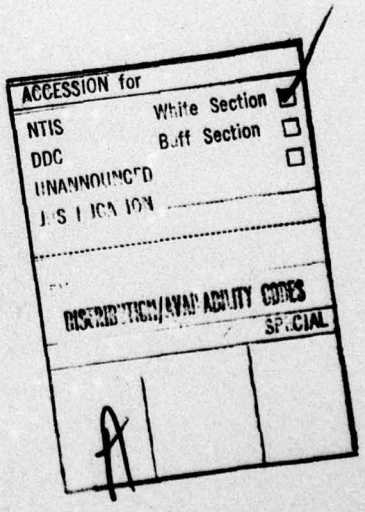
Approved for Distribution George D. Grice

George D. Grice, Chairman
Department of Biology

ABSTRACT

This report presents data obtained from cored sediments collected during numerous cruises in the Northwest Atlantic area. The cores were obtained by SCUBA, gravity cores and DSRV ALVIN. The sediments were sampled with 6 centimeter diameter plastic core liners and ranged in length from 9 to 63 centimeters. Analyses conducted on sediment material include organic carbon, organic nitrogen, percent sand-silt-clay, percent calcium carbonate and pore water concentrations of ammonia, nitrite, nitrate, silicate and phosphate.

This work was supported by ONR Contract N00014-74-C0262 and NSF Grant OCE 76-21878.



INTRODUCTION

Presented in this report are data determined from sediments collected by different means during a variety of cruises in the Northwest Atlantic Ocean. All nearshore samples were collected by SCUBA divers. Deeper samples were obtained either with a small 120 pound gravity corer from surface vessels or by utilizing the mechanical arm of DSRV ALVIN. All samples were collected in plastic core liners having an inside diameter of six centimeters. The sediment cores were either cut up, sub-sampled and squeezed for pore water at sea, or frozen immediately and then processed later in the laboratory. These data have been collected in an attempt to gain knowledge of the interrelationships between early diagenesis and remineralization of organic matter, bioturbation, and dissolved ion exchange between the sediments and the overlying water.

METHODS

All cores were extruded from the plastic core liners with a tight-fitting rubber stopper plunger and cut into three centimeter long sections. Sub-samples were taken from each section to determine organic carbon and nitrogen and percent sand-silt-clay. The sections were then compressed in a stainless steel squeezer powered by a hydraulic press (Manheim, 1966). The expelled water was collected in a 50 ml hypodermic syringe and then analyzed for dissolved nutrient concentrations with a Technicon autoanalyzer or immediately frozen and analyzed later in the laboratory.

Procedures for nutrient analyses using the Technicon autoanalyzer were based on the manual methods of Murphy and Riley (1962) for reactive phosphorous, and Armstrong, Stearns and Strickland (1967) for silicate, nitrite and nitrate. Ammonia was measured by the phenol-hypo-chlorite method of Koroleff (1970) as adapted to the autoanalyzer by Slawyk and MacIsaac (1972).

Nutrient analyses conducted in the laboratory used the procedures of Solorzano (1969) for ammonia, Wood *et al.* (1967) for nitrate and nitrite, and Murphy and Riley (1962) for phosphorous.

Sediment particle size distribution was determined using standard sieves for the sand fraction, and the procedure of Hathaway (1956) for the silt and clay fractions.

Values for organic carbon and nitrogen were obtained using a model 240 Perkin-Elmer Elemental Analyzer following the procedures of Menzel and Vaccaro (1964).

RESULTS

Figure 1 presents the station locations as listed in Table 1. Stations 703 through 747 were taken during R/V OCEANUS Cruise #6. Stations 586 through 660 refer to DSRV ALVIN dives. Stations 64 through 141 were taken on R/V KNORR Cruise #68. Station K (Sanders, 1958) was taken in Buzzards Bay from R/V ASTERIAS.

The remaining pages contain data on each core which have been determined at this date. Each core is defined by a two-part number separated

by a dash. The first part is the station number determined by the cruise on which the core was taken. The second part is the number of the core taken at that station.

The first column on each data page gives depth into the sediment measured in centimeters at which samples were taken for analyses. Zero indicates sediment at the sediment water interface and -1 refers to water taken just above the bottom.

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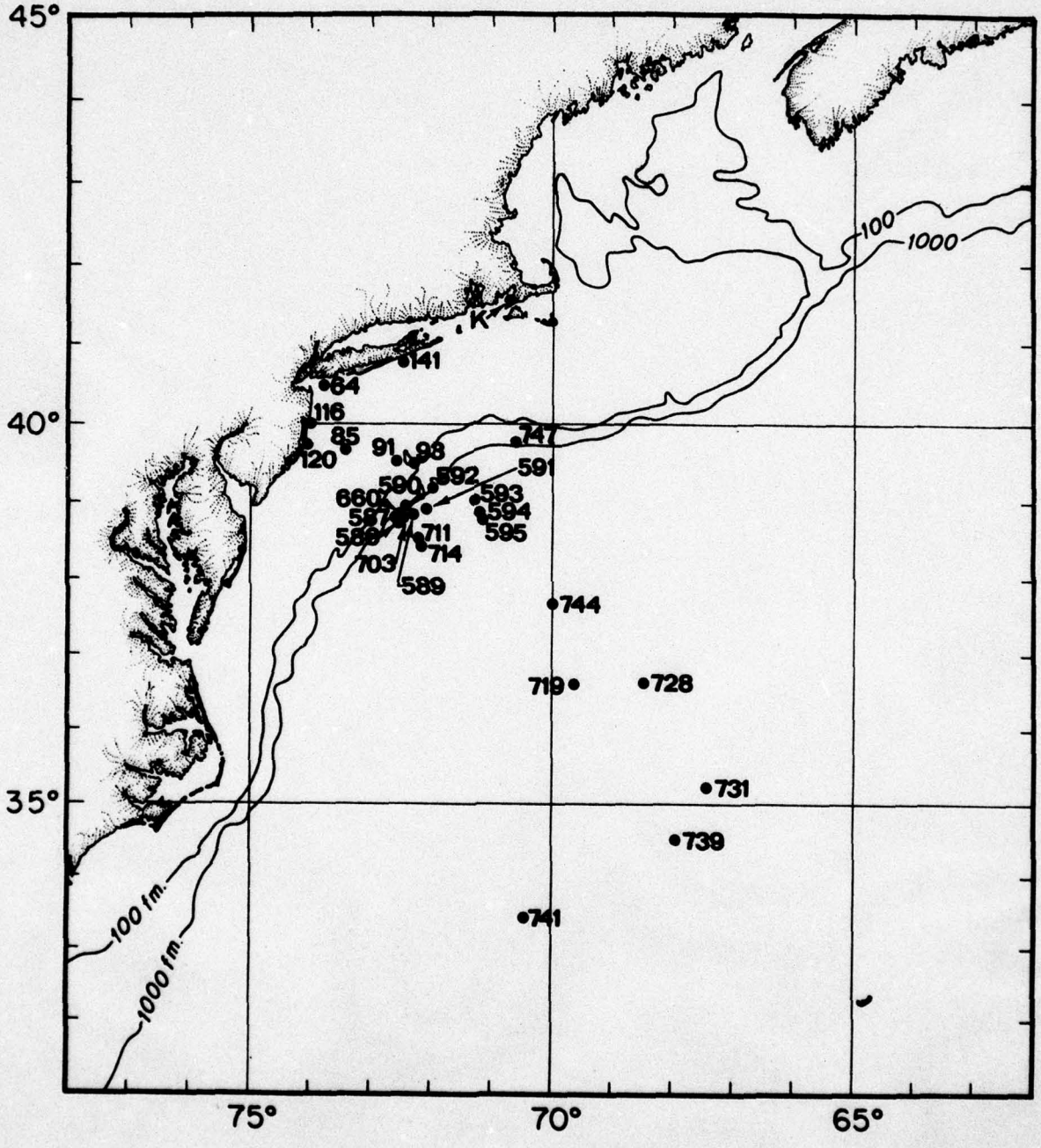

FIGURE 1

STATION LOCATIONS

TABLE 1

Station Locations and Depths

STATION	LATITUDE (N)	LONGITUDE (W)	DEPTH (METERS)
586	38°44.8'	72°31.6'	2351
587	38°50.0'	72°33.9'	2148
589	38°51.2'	72°18.9'	2452
590	38°56.5'	72°26.5'	1833
591	38°54.8	72°05.7'	2507
592	39°10.2'	71°55.6'	1988
593	39°01.2'	71°18.2'	2942
594	38°51.9'	71°11.0'	3162
595	38°46.4'	71°09.8'	3264
660	38°50.0'	72°31.0'	2215
703	38°48.7'	72°29.8'	2269
711	38°32.9'	72°12.6'	2646
714	38°25.5'	72°02.9	2780
719	36°36.0'	69°37.4'	4319
728	36°38.4'	68°27.3'	4675
731	35°13.0'	67°25.0'	5000
739	34°30.7'	67°56.6'	5206
741	33°26.6'	70°25.8'	5100
744	37°40.1'	70°00.4'	3989
747	39°46.5'	70°34.5'	1573
64	40°30.0'	73°46.5'	22
85	39°40.5'	73°25.0'	35
91	39°32.2'	72°34.5'	81
93	39°29.4'	72°17.0'	780
116	40°00.0'	73°58.0'	19
120	39°44.0'	73°57.0'	33
141	40°47.0'	72°28.0'	30
K	41°32.5'	70°44.0'	14

STATION 586-4 DATE 28 July 75 LATITUDE 39°44.8'N LONGITUDE 72°31.6'W DEPTH 2351

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	25.2	0.40	.13				123.00	0.62	80.38		5.00
3	27.9	0.63	.16				189.00	1.38	124.22		6.50
6	26.3	0.86	.20				180.00	0.98	101.42		7.20
9	29.8	0.88	.17				201.00	0.29	93.91		6.25
12	26.1	0.89	.17				207.00	0.50	101.00		5.50
15	27.7	1.51	.22				258.00	0.46	128.34		6.80
18	27.9	1.16	.19				177.00	0.28	90.22		7.10
21	26.6	0.83	.21				168.00	0.29	74.81		5.55
24	26.2	0.79	.18								
27											
30											
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60											

STATION 586-6 DATE 28 July 75 LATITUDE 38°44.8'N LONGITUDE 72°31.6'W DEPTH 2351

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	34.4	.95	.16				129.00	.96	65.44		6.55
3											
6	31.5	.97	.20				123.00	.18	39.42		7.20
9											
12	34.0	1.01	.20								
15											
18											
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STATION 587-2 DATE 29 July 75 LATITUDE 38°50.0'N LONGITUDE 72°33.9'W DEPTH 2148

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	29.2	1.47	.29				189.00	1.35	81.05		19.15
3	23.2	1.57	.40				150.00	0.36	58.84		12.05
6	22.6	1.51	.26				222.00	0.31	87.09		12.05
9	24.3	1.32	.32				240.00	0.28	105.32		9.25
12	25.4	1.40	.26				234.00	0.31	88.89		12.85
15	22.7	1.61	.30				243.00	0.25	86.25		11.55
18	22.6	1.68	.21								
21											
24											
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42											
45											
48											
51											
54											
57											
60											

STATION 587-3 DATE 29 July 75 LATITUDE 38°50.0'N LONGITUDE 72°33.9'W DEPTH 2148

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	35.7	3.97	.16				123.00	0.61	53.99		7.00
3	25.0	1.56	.20				150.00	0.34	50.66		9.96
6	27.2	1.74	.24				237.00	0.31	92.43		12.26
9	28.1	1.49	.19				213.00	0.39	69.71		11.95
12	28.9	1.61	.18				231.00	0.40	89.20		10.73
15	28.6	1.51	.22				189.00	0.26	78.44		10.50
18	32.4	1.30	.13				207.00	0.32	89.28		9.53
21	32.4	1.39	.19				180.00	0.36	83.34		8.25
24	32.7	1.21	.11								
27											
30											
33											
36											
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51											
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STATION 587-6 DATE 29 July 75 LATITUDE 38°50.0'N LONGITUDE 72°33.9'W DEPTH 2148

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	35.1	1.48	.29				102.00	0.66	45.74		7.75
3											
6	35.1	1.37	.33				141.00	0.32	74.28		13.70
9											
12	35.1	1.38	.25				174.00	0.13	45.37		9.75
15											
18	35.7	1.36	.24				195.00	0.20	76.70		11.15
21											
24	28.9	2.14	.23				213.00	0.19	74.01		8.65
27	35.2	1.55	.20								
30											
33											
36											
39											
42											
45											
48											
51											
54											
57											
60											

STATION 587-7 DATE 29 July 75 LATITUDE 39°50.0'N LONGITUDE 72°33.9'W DEPTH 2148

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	35.7	1.25	.17	7.4	49.4	43.2	225.48	0.64	20.48		65.80
3	31.3	1.29	.24				156.98	0.24	40.24		7.46
6	32.8	1.12	.18				151.50	0.17	24.47		7.70
9	27.4	1.31	.18				168.40	0.19	31.05		8.83
12	38.0	1.21	.15				182.67	0.21	32.79		8.91
15	32.3	1.21	.18				265.44	0.24	44.64		8.96
18	32.4	1.25	.15				205.50	0.26	35.38		10.56
21	10.9	1.61	.20				545.50	0.27	41.11		9.25
24	10.0	1.50	.21				236.90	0.25	40.67		10.66
27	33.9	1.36	.20				231.19	0.25	36.71		11.27
30	29.0	1.27	.18				294.00	0.26	49.90		11.83
33	36.2	1.31	.17				251.17	0.29	24.79		11.71
36	35.1	1.12	.14				345.35	0.75	29.61		9.54
39	34.9	1.12	.15								
42											
45											
48											
51											
54											
57											
60											

STATION 589-1 DATE 31 July 75 LATITUDE 38°51.2'N LONGITUDE 72°18.9'W DEPTH 2452

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	34.6	.88	.13	6.39	51.7	41.9	97.02	1.68	53.76		4.91
3	26.3	1.22	.12				145.53	0.46	44.42		7.99
6	26.8	.99	.13				125.55	0.23	29.25		6.07
9	30.4	.89	.12				159.80	0.34	37.50		7.22
12	27.0	1.05	.21				171.21	0.35	43.65		5.68
15	24.7	.60	.09				248.25	0.36	39.24		6.48
18	34.6	.84	.17								
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STATION 589-3 DATE 31 July 75 LATITUDE 38°51.2'N LONGITUDE 72°18.9'W DEPTH 2452

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	31.5	1.09	.19	7.3	51.5	41.2	321.50	2.34	58.82		6.90
3	26.5	.91	.12				133.96	0.25	29.23		8.44
6	28.2	1.00	.12				225.43	0.30	46.34		11.96
9	22.9	1.09	.16				217.31	0.22	43.78		7.65
12	18.2	1.05	.10				439.44	0.65	58.75		6.22
15	24.5	.97	.15								
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STATION 589-4 DATE 31 July 75 LATITUDE 38°51.2'N LONGITUDE 72°18.9'W DEPTH 2452

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	33.0	.81	.11				144.00	0.94	82.80		5.64
3	28.6	.98	.15				147.00	0.39	60.50		6.28
6	27.4	.95	.13				171.00	0.38	77.40		7.92
9	28.0	1.00	.13				201.00	0.43	85.50		7.41
12	26.2	1.21	.17				261.00	0.35	104.70		7.53
15	23.5	1.22	.13				237.00	0.44	98.70		7.56
18	27.3	.99	.16								
21											
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60											

STATION 589-7 DATE 31 July 75 LATITUDE 38°51.2'N LONGITUDE 72°18.9'W DEPTH 2452

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	30.4	1.06	.12				132.00	2.62	56.58		8.30
3	27.4	.76	.12				141.00	0.92	69.58		11.50
6	25.6	.98	.13				156.00	0.42	79.18		13.30
9	29.9	.91	.12				168.00	0.25	83.45		7.92
12	27.6	.83	.13				258.00	0.53	117.77		7.66
15	24.8	.76	.10				315.00	0.36	152.04		6.69
18	43.3	.69	.09								
21											
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STATION 589-8 DATE 31 July 75 LATITUDE 38°51.2'N LONGITUDE 72°18.9'W DEPTH 2452

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	32.4	.81	.12	7.6	57.2	39.6	413.76	1.99	64.89		5.33
3	27.1	.81	.11				351.06	0.99	88.33		12.39
6	27.2	.87	.12				336.79	0.28	108.84		8.45
9	27.6	.90	.12				148.38	0.17	42.07		6.79
12	27.0	.89	.12				162.69	0.22	48.18		7.56
15	26.4	.88	.12				179.81	0.20	47.32		7.43
18	24.6	.89	.12				179.81	0.20	48.64		7.08
21	27.3	.86	.12				215.56	0.31	54.87		7.15
24	27.9	.89	.13				225.48	0.33	47.63		6.13
27	21.4	.79	.10								
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60											

STATION 589-9 DATE 31 July 75 LATITUDE 38°51.2'N LONGITUDE 72°18.9'W DEPTH 2452

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	26.5	.75	.10	21.3	44.9	33.8	275.92	1.82	53.81		6.30
3	22.0	.65	.09				198.32	0.31	98.92		6.25
6	26.3	.70	.10				238.56	0.24	79.86		6.34
9	24.5	.89	.12				293.34	0.24	67.08		6.68
12	27.0	.78	.11				241.50	0.24	76.75		5.20
15	22.9	.55	.08				264.42	0.18	150.23		5.70
18	23.9	.43	.06				307.53	0.28	99.85		6.15
21	10.3	.19	.03				382.26	0.36	137.14		6.15
24	22.6	.88	.11				376.50	0.86	126.74		5.40
27	18.0	.81	.11								
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STATION 590-4 DATE 1 Aug 75 LATITUDE 38°56.5'N LONGITUDE 72°26.5'W DEPTH 1833

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	24.3	1.15	.14	4.59	54.9	40.5	592.43	3.14	97.18		7.42
3	23.5	1.16	.16				169.68	0.52	90.12		6.68
6	23.3	1.09	.14				155.30	0.16	55.72		6.55
9	22.8	1.19	.15				221.44	0.18	77.26		7.29
12	29.4	1.03	.12				198.43	0.21	58.75		9.58
15	26.6	1.17	.13				422.75	0.18	165.26		7.80
18	25.1	1.06	.13				232.94	0.19	96.61		8.31
21	21.0	1.08	.14				290.46	0.16	114.68		9.72
24	24.6	.99	.14				274.50	0.20	103.67		12.25
27	21.2	1.00	.14				258.83	0.14	100.62		10.03
30	14.4	.80	.10				373.86	0.30	127.74		8.62
33	21.4	.82	.10								
36											
39											
42											
45											
48											
51											
54											
57											
60											

STATION 590-5 DATE 1 Aug 75 LATITUDE 38°56.5'N LONGITUDE 72°26.5'W DEPTH 1833

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	24.1	1.55	.25	5.45	52.7	41.8	78.50	2.10	34.42		5.58
3	24.8	1.25	.16				168.36	0.56	48.28		5.04
6	21.4	1.15	.18				163.73	0.29	31.92		4.87
9	20.7	1.83	.14				175.63	0.28	54.28		4.36
12	18.9	1.24	.18				128.00	0.30	31.82		5.21
15	19.6	1.07	.15				133.96	0.27	30.97		4.49
18	14.4	1.06	.13				208.38	0.35	37.05		4.59
21	21.0	.95	.15								
24											
27											
30											
33											
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45											
48											
51											
54											
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STATION 590-6 DATE 1 Aug 75 LATITUDE 38°56.5'N LONGITUDE 72°26.5'W DEPTH 1833

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	26.8	1.16	.16	12.67	46.9	40.4	104.19	0.74	58.66		4.28
3	23.3	.81	.11				104.19	0.35	60.81		6.67
6	23.0	.79	.10				139.91	0.59	50.89		8.98
9	28.2	.83	.11				169.68	0.44	41.80		6.41
12	21.6	1.03	.13				142.89	0.29	32.27		4.36
15	19.5	.94	.12				172.66	0.34	36.62		3.16
18	6.4	.56	.06				187.50	0.33	31.35		2.70
21	2.5	.62	.06				157.77	0.49	28.11		3.51
24	2.2	.57	.05				217.31	0.50	23.70		3.80
27	1.6	.62	.05				202.43	0.56	27.16		2.57
30	5.3	.62	.05								
33											
36											
39											
42											
45											
48											
51											
54											
57											
60											

STATION 590-7 DATE 1 Aug 75 LATITUDE 38°56.5'N LONGITUDE 72°26.5'W DEPTH 1833

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	18.9	.92	.11	5.0	47.7	47.3	139.91	0.88	69.96		7.57
3	10.6	1.09	.05				110.14	0.48	59.36		7.82
6	5.6	.60	.06				130.98	0.57	36.39		7.21
9	5.5	.72	.06				111.50	0.33	30.53		4.40
12	5.7	.77	.06				151.82	0.24	36.28		3.33
15	4.0	.88	.07				108.50	0.31	41.68		4.05
18	4.3	.83	.13				163.73	0.23	33.65		3.49
21	5.7	.74	.08				193.50	0.18	32.82		2.70
24	1.6	.81	.13				182.62	0.31	34.45		2.05
27	2.0	.93	.13				293.91	0.92	49.68		2.64
30	1.8	.75	.08								
33											
36											
39											
42											
45											
48											
51											
54											
57											
60											

STATION 590-8 DATE 1 Aug 75 LATITUDE 38°56.5'N LONGITUDE 72°26.5'W DEPTH 1833

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	29.8	1.12	.15	2.8	49.1	48.1	198.43	0.56	96.24		7.90
3							192.68	0.62	94.86		6.57
6	25.7	1.18	.16				345.10	0.28	154.16		6.73
9	23.6	1.19	.15				287.59	0.18	114.22		6.70
12	21.9	1.24	.16				434.26	0.24	132.20		7.03
15	27.5	1.20	.16				606.81	0.18	105.86		6.40
18	27.2	1.10	.15				408.37	0.19	114.65		7.42
21	23.1	.97	.13				290.46	1.72	91.12		6.45
24	21.4	1.11	.15								
27											
30											
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STATION 591-6 DATE 2 Aug 75 LATITUDE 38°51.2'N LONGITUDE 72°05.7'W DEPTH 2509

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	29.8	.92	.12				114.00	2.12	89.20		6.00
3	28.8	.73	.10				126.00	2.57	69.60		7.28
6	24.6	.69	.09				144.00	0.86	78.30		5.72
9	6.0	.72	.07				156.00	0.61	76.90		5.41
12	8.1	.90	.10				150.00	0.38	70.50		5.62
15	6.2	.72	.08				177.00	0.28	82.80		5.11
18	5.6	.71	.08				135.00	0.46	65.50		3.88
21	6.5	.69	.08				132.00	0.43	55.50		3.60
24	7.4	.74	.08								
27											
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STATION 592-6 DATE 3 Aug 75 LATITUDE 39°10.2'N LONGITUDE 71°55.6'W DEPTH 1988

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	29.8	2.19	.15				135.00	6.00	75.40		6.40
3	23.8	.93	.10				144.00	2.16	88.84		9.58
6	19.3	1.35	.11				324.00	0.40	133.40		5.92
9	22.7	.96	.12				198.00	0.25	99.85		7.10
12	19.2	1.07	.11				270.00	0.29	136.71		6.13
15	22.0	1.08	.19				210.00	0.33	87.07		8.55
18	21.5	1.00	.15				141.00	0.41	54.19		6.92
21	16.3	.91	.11								
24											
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STATION 592-7 DATE 3 Aug 75 LATITUDE 39°10.2'N LONGITUDE 71°55.6'W DEPTH 1988

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	14.8	.31	.03	76.0	14.3	9.7	209.81	0.56	64.41		3.70
3	13.0	.23	.03				485.73	0.33	279.13		3.75
6	14.5	.31	.04				417.00	0.48	221.28		3.30
9	11.7	.32	.04				356.61	0.32	164.68		2.89
12	6.8	.46	.05				402.62	0.50	146.90		2.81
15	6.8	.33	.04				385.36	0.36	121.96		3.58
18	3.7	.36	.04				563.50	1.35	177.95		4.15
21	6.8	.40	.05								
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STATION 593-1 DATE 13 Aug 75 LATITUDE 39°01.2'N LONGITUDE 71°18.2'W DEPTH 2942

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	34.3	.80	.06	48.2	24.9	26.9	267.00	0.21	221.20		4.65
3	33.0	.49	.06				234.00	0.79	164.80		6.10
6	27.1	.53	.06				270.00	0.62	180.30		6.05
9	23.3	.61	.06				279.00	0.32	165.30		6.40
12	10.5	.58	.07				408.00	0.33	247.20		6.85
15	14.9	.50	.04				468.00	0.30	276.90		6.60
18	10.9	.61	.08				363.00	0.42	164.30		7.40
21	12.2	.71	.06	56.6							
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STATION 593-2 DATE 13 Aug 75 LATITUDE 39°01.2'N LONGITUDE 71°18.2'W DEPTH 2942

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	16.7	.64	.04	71.6	14.9	13.5	156.50	0.32	95.16		4.31
3	28.8	.29	.05				259.00	0.31	239.05		4.23
6	27.4	.26	.10				217.00	0.42	171.18		4.39
9	23.3	.39	.04				202.00	0.82	120.82		4.13
12	26.7	.41	.05				229.00	0.91	112.61		4.16
15	28.0	.26	.06				235.00	0.86	118.38		5.61
18	23.4	.34	.04	49.3			237.00	0.47	187.40		7.45
21	30.7	.37	.04				234.00	0.58	192.30		6.76
24	20.2	.38	.04				234.00	0.71	159.70		4.67
27	18.5	.40	.05								
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STATION 594-1 DATE 14 Aug 75 LATITUDE 38°51.9'N LONGITUDE 71°11.0'W DEPTH 3162

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	32.0	.45	.06	43.2	32.6	24.2	145.53	0.26	49.90		4.43
3	37.7	.31	.08				151.24	0.42	71.30		4.79
6	36.9	.87	.07				211.16	0.96	69.44		6.73
9	34.1	.54	.06	36.2			185.48	0.64	49.08		5.43
12	35.3	.69	.07				182.62	0.58	53.54		4.79
15	13.8	.36	.07				448.00	0.98	245.42		5.25
18	9.2	.73	.08	20.7			384.00	0.35	161.00		4.31
21	15.4	.56	.08				356.69	0.35	122.85		4.61
24	16.0	.69	.05				530.75	0.36	57.28		4.28
27	13.3	.52	.06								
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STATION 594--4 DATE 14 Aug 75 LATITUDE 38°51.9'N LONGITUDE 71°11.0'W DEPTH 3162

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	31.3	1.31	.17	47.05	23.0	29.9	339.00	0.48	237.60		3.85
3	26.7	.72	.04				420.00	0.91	227.30		4.45
6	25.7	.39	.02				453.00	0.53	186.30		5.50
9	29.4	.32	.03				258.00	0.38	208.40		4.15
12	24.6	.31	.03	40.6			357.00	0.65	267.10		
15											
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60											

STATION 594-5 DATE 14 Aug 75 LATITUDE 38°51.9'N LONGITUDE 71°11.0'W DEPTH 3162

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	49.4	.79	.07	48.2	25.0	26.8	219.00	1.23	125.70		4.50
3	45.3	.61	.05				243.00	3.60	134.10		4.05
6	42.9	.45	.05				267.00	2.27	124.60		4.90
9	41.5	.68	.04				372.00	1.27	207.50		5.35
12	37.8	.37	.07	54.6							
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STATION 594-6 DATE 14 Aug 75 LATITUDE 38°51.9'N LONGITUDE 71°11.0'W DEPTH 3162

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	38.2	1.53	.09	31.2	34.4	34.4	242.00	0.46	193.20		5.08
3	48.2	.81	.07				246.00	2.58	183.00		5.77
6	44.3	1.21	.07				252.00	1.64	168.50		6.05
9	36.7	.98	.08				330.00	0.41	205.00		6.05
12	37.6	.84	.09	27.1			294.00	0.31	186.00		4.15
15	37.9	.77	.08				241.00	0.23	185.70		5.45
18	25.2	.73	.08								
21											
24											
27											
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STATION 595-1 DATE 15 Aug 75 LATITUDE 38°46.4'N LONGITUDE 71°09.8'W DEPTH 3264

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	43.9	.52	.07	48.7	28.4	22.9	249.50	0.73	138.75		5.23
3	39.5	.40	.05				157.50	0.83	91.57		17.01
6	31.3	.50	.06				166.50	0.90	121.86		4.49
9	36.2	.60	.07				187.50	0.70	124.70		3.83
12	42.1	.41	.07	50.0			232.00	0.84	126.36		3.35
15	39.6	.74	.10				223.00	1.84	110.80		3.60
18	30.6	.35	.05				241.00	1.10	117.70		2.68
21	7.2	.45	.04	33.4			342.00	1.26	193.66		3.65
24	7.8	.54	.06				375.00	1.60	180.40		4.95
27	9.8	.51	.05								
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42											
45											
48											
51											
54											
57											
60											

STATION 595-2 DATE 15 Aug 75 LATITUDE 38°46.4'N LONGITUDE 71°09.8'W DEPTH 3264

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	39.0	.95	.09	38.4	35.4	26.2	195.00	0.39	152.60		3.45
3	41.9	.69	.06				222.00	0.74	168.10		3.55
6	26.6	1.39	.04				207.00	0.29	141.20		3.80
9	30.9	.99	.06				174.00	0.15	140.80		4.24
12	34.9	.60	.04	44.2			210.00	0.21	169.40		4.98
15	36.7	.38	.04				242.00	0.38	172.90		5.31
18	38.5	.49	.05				336.00	0.37	218.70		5.80
21	36.4	.27	.03	32.7			447.00	0.80	299.20		9.11
24	18.2	.56	.07								
27											
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54											
57											
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STATION 595-3 DATE 15 Aug 75 LATITUDE 38°46.4'N LONGITUDE 71°09.8'W DEPTH 3264

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	29.1	.34	.06	53.1	17.9	29.0	210.00	0.28	189.60		4.36
3	27.6	.39	.03				291.00	0.72	192.30		5.26
6	20.9	.45	.05				417.00	2.00	297.40		4.85
9	5.5	.25	.06				612.00		417.96		
12	14.5	.80	.12	44.6			489.00		340.96		
15	6.1	.24	.02				675.00		471.16		
18	10.0	.35	.04				276.00		289.06		
21	6.8	.29	.02				357.00	0.75	176.40		6.20
24	14.9	.50	.04				413.85	1.40	263.92		5.29
27	14.2	.45	.05				548.00	1.95	310.25		5.65
30	11.4	.58	.06								
33											
36											
39											
42											
45											
48											
51											
54											
57											
60											

STATION 595-4 DATE 15 Aug 75 LATITUDE 38°46.4'N LONGITUDE 71°09.8'W DEPTH 3264

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	37.1	1.95	.12	58.2	22.0	19.8	177.00	0.29	121.20		5.00
3	31.4	.90	.04				189.00	0.56	107.90		7.30
6	29.9	.47	.04				234.00	0.54	117.90		6.85
9	24.8	.49	.04				369.00	1.20	167.00		7.30
12	12.5	.50	.04	69.4			357.00	0.68	153.70		4.55
15	15.7	.52	.05								
18											
21											
24											
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STATION 660-1 DATE 26 June 76 LATITUDE 38°50.0'N LONGITUDE 72°31.0'W DEPTH 2215

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	28.3	1.27	.17	3.6	43.5	52.9	153.00	1.50	76.4		5.30
3	20.4	1.33	.18				198.00	1.35	95.2		5.90
6	22.3	1.28	.18				135.00	0.59	54.1		4.15
9	23.2	1.26	.17				168.00	0.49	63.6		6.80
12	22.9	1.17	.17				291.00	0.67	115.9		7.30
15	23.9	1.13	.16				402.00	0.75	164.3		8.20
18	26.7	1.44	.20								
21											
24											
27											
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STATION 703-1 DATE 11 May 76 LATITUDE 38°48.7'N LONGITUDE 72°29.8'W DEPTH 2269

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	22.4	.71	.10	23.1	48.6	28.3	126.88	0.94	40.46		5.30
3	27.0	.67	.10				182.94	1.04	31.36		5.48
6	30.3	.82	.12				236.05	0.37	25.28		6.76
9	31.3	.95	.16				256.70	0.21	27.24		7.52
12	21.4	.59	.09				283.00	0.24	32.06		7.46
15	20.6	.66	.09				714.00		92.20		
18	18.7	.53	.07				655.03		101.25		
21	17.3	.56	.09								
24											
27											
30											
33											
36											
39											
42											
45											
48											
51											
54											
57											
60											

STATION 711-1 DATE 13 May 76 LATITUDE 38°32.9'N LONGITUDE 72°12.6'W DEPTH 2646

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	44.0	.77	.12	6.8	39.8	53.4	115.00	0.48	45.00		4.57
3	32.7	.75	.12				112.12	2.98	27.17		6.33
6	36.9	.89	.13				138.68	0.40	19.40		6.31
9	35.8	.91	.13				153.50	0.16	18.64		7.30
12	39.1	.80	.15				192.00	0.21	26.19		7.15
15	34.4	.87	.14				191.00	0.13	23.77		7.95
18	41.2	.82	.13				200.64	0.19	25.01		7.70
21	38.7	.86	.14				206.54	0.20	23.20		8.40
24	37.8	.84	.14								
27	35.2	.85	.13								
30	36.9	.96	.15				245.00	0.16	27.24		7.95
33	37.6	.76	.12								
36	38.4	.93	.16								
39	39.7	.84	.13								
42	35.1	.87	.12				283.26	0.20	34.45		8.83
45	30.8	.95	.14								
48	30.9	.84	.14								
51	41.1	.89	.12								
54	31.8	.80	.12								
57	35.3	.89	.13				298.00	0.20	18.70		9.25
60	24.9	.80	.13								
63	32.8	.89	.14								
66											

STATION 714-1 DATE 13 May 76 LATITUDE 38°25.5'N LONGITUDE 72°02.9'W DEPTH 2780

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	39.8	.80	.12	5.6	40.5	53.9	127.00	0.99	67.51		4.70
3	41.9	.73	.12				153.50	1.17	51.43		6.40
6	43.5	.74	.15				127.00	2.44	20.78		7.10
9	37.9	.74	.15				129.83	0.21	25.44		6.81
12	42.2	.78	.14				144.58	0.24	16.41		6.69
15	42.9	.71	.12				162.50	0.19	21.91		7.45
18	40.6	.60	.10				194.74	0.18	25.92		6.71
21	38.4	.73	.11				185.89	0.19	25.44		6.84
24	38.9	.80	.12				233.10	0.20	23.65		6.18
27	30.6	.65	.10								
30	28.7	.59	.15				233.10	0.22	32.63		8.08
33	40.7	.88	.19								
36	41.1	.71	.11								
39	28.2	.60	.09								
42	35.3	.66	.13				265.50	0.57	23.53		8.85
45	26.3	.66	.14								
48	30.3	.55	.08								
51	29.5	.70	.11								
54	30.9	.66	.09								
57	36.3	.76	.12				309.81	0.31	30.74		8.71
60	37.5	.65	.09								
63	30.3	.66	.12								
66											

STATION 719-1 DATE 14 May 76 LATITUDE 36°36.0'N LONGITUDE 69°37.4'W DEPTH 4319

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	34.6	.62	.07	12.68	49.8	37.5	244.90	0.52	226.93		2.27
3	34.4	.49	.08				374.50	0.32	65.08		3.05
6	38.1	.45	.07				696.34	0.06	63.39		3.99
9	32.3	.46	.07				301.00	0.34	261.36		4.55
12	31.8	.43	.06				298.00	0.37	266.13		5.15
15	26.4	.41	.05				224.24	0.39	137.31		5.05
18	25.3	.45	.05				236.05	0.31	48.74		6.06
21	25.4	.39	.06				626.50	0.33	131.97		6.70
24	29.3	.51	.09								
27	28.6	.41	.06								
30	29.9	.42	.06				321.62	0.34	257.51		7.17
33	30.5	.45	.07								
36	28.0	.36	.06								
39	28.6	.35	.07				303.91	0.43	248.42		7.19
42	35.1	.45	.08								
45											
48											
51											
54											
57											
60											

STATION 728-1 DATE 16 May 76 LATITUDE 36°38.4'N LONGITUDE 68°27.3'W DEPTH 4675

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	37.5	.49	.07	46.7	35.4	17.9	315.50	0.88	311.62		3.41
3	35.8	.34	.06				310.00	0.35	246.25		4.42
6	25.0	.43	.04				304.00	0.45	270.45		3.75
9	30.7	.29	.05				324.50	0.33	284.57		3.50
12	32.2	.38	.07				389.50	0.28	328.52		3.70
15	24.9	.23	.05				484.00	0.27	431.13		4.45
18	27.7	.28	.04				354.07	0.33	325.20		4.34
21	30.1	.25	.04				333.50	0.33	295.27		5.65
24	36.8	.40	.07								
27	34.9	.41	.07								
30	29.1	.24	.05				307.07	0.22	250.88		4.35
33	27.0	.29	.05								
36	32.5	.19	.05								
39	24.8	.39	.08								
42	28.0	.24	.04				268.50	0.23	225.67		5.68
45	24.2	.36	.05								
48	28.5	.34	.06								
51	19.8	.37	.07				271.45	0.27	211.23		6.11
54	21.5	.35	.05								
57	25.5	.31	.05								
60											
63											

STATION 731-1 DATE 17 May 76 LATITUDE 35'13.0'N LONGITUDE 67°25.0'W DEPTH 5000

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	38.7	.44	.07	7.4	5.13	41.3	156.50	0.18	143.90		5.85
3	34.5	.38	.07				286.00	0.30	261.80		2.73
6	23.6	.35	.07				368.82	0.26	332.74		2.70
9	26.0	.30	.05				339.32	0.24	318.81		2.60
12	38.6	.26	.04				274.50	0.19	234.11		2.91
15	39.4	.34	.04				268.50	0.14	252.76		2.85
18	42.9	.34	.04				315.71	0.25	279.20		2.93
21	39.4	.27	.04				404.00	0.22	331.28		3.35
24	38.9	.50	.02								
27	29.2										
30	13.9	.13	.03				321.50	0.18	276.12		3.80
33	13.9	.17	.02								
36	15.5	.41	.06								
39											
42											
45											
48											
51											
54											
57											
60											

STATION 739-1 DATE 19 May 76 LATITUDE 34°30.7'N LONGITUDE 67°56.6'W DEPTH 5206

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	28.1	.65	.09	4.9	39.6	55.5	383.50	0.34	340.31		1.70
3	20.6	.45	.07				301.00	0.21	273.79		2.28
6	19.1	.37	.12				407.00	0.14	324.66		2.80
9	23.2	.37	.06				422.00	0.11	312.19		2.85
12	24.6	.31	.07				203.50	0.15	108.15		2.98
15	23.2	.33	.06				498.50	0.11	328.29		3.05
18	14.9	.32	.04				392.50	0.31	174.15		3.35
21	12.8	.29	.03				221.50	0.16	117.24		3.75
24	8.1	.25	.04				262.50	0.10	139.70		4.30
27	9.7	.26	.03								
30											
33											
36											
39											
42											
45											
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51											
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STATION 741-1 DATE 20 May 76 LATITUDE 33°26.6'N LONGITUDE 70°25.8'W DEPTH 5100

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	37.6	.56	.08	2.3	45.8	51.9	121.00	0.91	74.69		1.90
3	29.5	.58	.07				124.00	0.27	80.33		1.55
6	41.5	.48	.07				118.00	0.19	87.21		1.90
9	36.2	.35	.05				130.00	0.16	86.94		4.55
12	39.3	.29	.06				153.50	0.30	95.60		2.46
15	41.2	.31	.05				147.50	0.18	102.82		1.95
18	42.0	.29	.04				150.50	0.33	96.42		1.85
21	36.4	.31	.05				168.00	0.24	88.56		2.40
24	42.1	.34	.05				162.50	0.13	99.47		7.70
27	24.6	.26	.04				150.50	0.18	90.92		5.80
30	17.3	.25	.04				141.50	0.14	85.86		2.05
33	16.0	.24	.05								
36											
39											
42											
45											
48											
51											
54											
57											
60											

STATION 744-1 DATE 21 May 76 LATITUDE 37°40.1'N LONGITUDE 70°00.4'W DEPTH 3989

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	36.5	.54	.06	5.9	42.2	51.9	85.50	0.44	45.56		3.21
3	31.6	.62	.10				109.00	0.52	46.38		6.60
6	35.4	.66	.09				100.50	2.86	38.24		8.15
9	35.2	.67	.09				127.00	0.15	36.55		10.55
12	33.6	.75	.11				136.68	0.19	43.91		7.87
15	34.3	.67	.09				135.50	0.30	40.00		7.80
18	33.9	.81	.12				132.78	0.22	45.23		7.77
21	36.8	.82	.10								
24	36.0	.56	.08								
27	32.3	.62	.07								
30	37.9	.53	.11				168.00	0.21	46.69		8.85
33	25.3	.58	.09								
36	28.4	.73	.10								
39	29.8	.65	.10								
42	32.5	.44	.07								
45	29.6	.45	.08				218.50	0.35	65.95		8.85
48	26.1	.48	.07								
51	29.6	.40	.06								
54											
57											
60											

STATION 747-1 DATE 21 May 76 LATITUDE 39°46.5'N LONGITUDE 70°34.5'W DEPTH 1573

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	21.9	1.34	.19	4.7	57.9	37.4	91.50	5.64	64.66	—	6.10
3	22.9	1.06	.18				103.50	0.40	32.30		9.05
6	18.5	1.14	.16				100.50	0.30	33.70		11.10
9	20.1	1.19	.17				147.50	0.17	35.23		11.50
12	22.5	1.23	.19				138.50	0.22	33.78		12.70
15	21.9	1.18	.17				171.11	0.34	34.56		11.95
18	23.5	1.31	.18				186.00	0.21	42.19		11.85
21	25.1	1.13	.20								
24	14.5	.99	.14								
27	24.8	.93	.14								
30	30.5	.59	.11				271.50	0.11	25.90		12.05
33	14.3	.82	.12								
36	19.2	1.03	.15				307.00	0.14	67.96		13.65
39	17.9	.96	.12								
42	25.4	.92	.13								
45											
48											
51											
54											
57											
60											

STATION 64-1 DATE 18 Aug 77 LATITUDE 40°30.0'N LONGITUDE 73°46.5'W DEPTH 22

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1							4.23	0.48	14.2	12.6	1.3
0	2.6	.43	.05	88.2	4.5	7.3	932.00	4.50	734.0	125.3	5.4
3	2.3	.25	.04				1712.00	2.70	1265.0	126.7	6.6
6	2.9	.18	.02				1916.00	2.00	1390.0	116.0	45.6
9	2.7	.20	.03								
12											
15											
18											
21											
24											
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STATION 85-1 DATE 21 Aug 77 LATITUDE 39°40.5'N LONGITUDE 73°25.0'W DEPTH 35

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1							4.9	0	0	5.5	0.5
0	0.2	.11	.04	97.6	0.2	2.2	3.3	0	32.3	64.7	24.3
3	1.0	.08	.01				6.6	0	7.3	50.7	21.7
6	0.8	.05	.01				63.3	0	0	92.7	31.0
9	0.9	.05	.01				136.6	0	0	130.0	45.0
12	0.4	.04	.01								
15											
18											
21											
24											
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STATION 91-1 DATE 22 Aug 77 LATITUDE 39°32.2'N LONGITUDE 72°34.5'W DEPTH 81

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1							.17	.04		3.76	0.35
0	2.3	.17	.03	95.2	1.4	3.4	544.70	6.70		950.00	53.80
3	2.1	.16	.02				376.70	6.30		1145.00	44.20
6	1.8	.10	.01				491.00	13.50		1675.00	58.90
9	2.0	.40	.05								
12											
15											
18											
21											
24											
27											
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STATION 93-1 DATE 22 Aug 77 LATITUDE 39°29.4'N LONGITUDE 72°17.0'W DEPTH 780

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1								0.1		20.0	2.8
0	9.9	1.17	.13				488.0	1.0	280.5	470.0	10.0
3	5.6	0.61	.09	71.1	16.0	12.9	423.0	1.5	250.5	422.5	4.8
6	6.3	0.41	.06				1517.0	0.6	789.0	425.0	6.7
9	6.2	0.15	.01				1206.0	0.5	680.5	267.5	9.2
12	6.5	0.43	.05								
15											
18											
21	7.6	0.54	.07				516.0	0.2	266.5	315.0	7.8
24	8.0	0.42	.05								
27											
30											
33											
36											
39											
42											
45											
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51											
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57											
60											

STATION 116-1 DATE 25 Aug 77 LATITUDE 40°00'N LONGITUDE 73°58.0'W DEPTH 19

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1							4.13	0.49	3.25	16.04	1.97
0	1.1	.29	.04	75.8	6.6	17.6	2193.00	0	0	1476.00	159.30
3	1.6	.30	.04								
6											
9											
12											
15											
18											
21											
24											
27											
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33											
36											
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STATION 120-1 DATE 26 Aug 77 LATITUDE 39°44.0'N LONGITUDE 73°57.0'W DEPTH 33

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1							9.1	1.01	4.6	23.4	2.06
0	0.9	.09	.01	98.0	0.3	1.7	351.7	0	13.6	580.4	155.30
3	0.8	.04	.007				398.8	0	0	529.1	118.00
6	1.2	.08	.009				403.5	0	0	477.8	99.40
9	1.7	.08	.010				506.2	0	0	557.1	108.70
12	0.6	.03	.007								
15											
18											
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STATION 141-1 DATE 28 Aug 77 LATITUDE 40°47.0'N LONGITUDE 72°28.0'W DEPTH 30

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1							2.9	.26	2.4	28.6	1.9
0	4.9	.91	.140	91.7	2.5	5.8	215.6	152.50	27.1	542.8	58.6
3	1.4	.10	.050				322.9	0	3.7	138.5	67.0
6	0.8	.04	.010				278.6	0	0	156.5	10.5
9	0.4	.04	.008				455.9	0	0	351.6	13.9
12	1.3	.08	.010								
15											
18											
21											
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STATION K-1 DATE 5 Nov 74 LATITUDE 41°32.5'N LONGITUDE 70°44.0'W DEPTH 14

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	4.4	2.24	.28	3.4	56.9	39.7	350.2	0.20	60.1		13.6
3	5.8	2.01	.23				313.3	0.18	43.4		26.8
6	3.9	1.98	.22				420.5	0.19	72.7		30.6
9	4.6	2.03	.45				457.0	0.28	63.8		24.5
12	5.4	1.83	.21				546.0	0.21	95.9		17.4
15	12.5	1.86	.22				534.9	0.21	114.6		17.2
18	8.0	1.85	.21				372.0	0.27	128.8		17.4
21	5.8	1.68	.19				1166.9	13.10	136.0		5.6
24	18.1	1.45	.16								
27											
30											
33											
36											
39											
42											
45											
48											
51											
54											
57											
60											

STATION K-2 DATE 5 Nov 74 LATITUDE 41°32.5'N LONGITUDE 70°44.0'W DEPTH 14

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	9.6	2.36	.34	2.0	52.6	45.4	296.0	0.49	107.2		2.65
3	2.3	1.99	.22				386.0	0.38	133.6		16.60
6	10.6	2.10	.24				315.7	0.24	64.3		33.60
9	7.2	2.02	.23				414.0	0.29	150.1		28.30
12	11.1	1.85	.24				422.5	0.28	156.8		28.10
15	11.7	1.85	.22				514.0	0.34	181.7		25.50
18	13.4	1.82	.21				1428.5	13.70	73.1		4.70
21	12.9	1.60	.19								
24											
27											
30											
33											
36											
39											
42											
45											
48											
51											
54											
57											
60											

STATION K-3 DATE 23 July 76 LATITUDE 41°32.5'N LONGITUDE 70°44.0'W DEPTH 14

Depth in sediment (cm)	% $CaCO_3$	% Organic Carbon	% Organic Nitrogen	% Sand	% Silt	% Clay	Pore Water Nutrients (µgA/L) NH_4	NO_2	NO_3	SiO_4	PO_4
-1											
0	5.2	2.11	.29	6.0	58.9	35.1	384.5	0.93	78.4		89.0
3	4.1	2.18	.28				346.5	0.49	83.7		140.5
6	7.4	2.01	.24				370.0	0.22	104.2		196.0
9	4.2	1.99	.28				461.0	0.40	121.9		206.5
12	1.1	2.13	.30				343.5	0.26	67.3		232.0
15	3.8	1.97	.25				405.0	0.31	83.0		226.5
18	2.9	1.82	.25				472.5	0.47	99.9		239.5
21							502.0	0.43	95.5		290.0
24	3.4	1.98	.25								
27											
30											
33											
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60											

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SEDIMENT DATA FROM SHORT CORES TAKEN IN THE NORTHWEST ATLANTIC OCEAN by Gilbert T. Rowe and C. Hovey Clifford. May 1978. 58 pages. Prepared for the Office of Naval Research under Contract N00014-74-C-0262; NR 083-004 and for the National Science Foundation under Grant OCE 76-21878.

This report presents data obtained from cored sediments collected during numerous cruises in the Northwest Atlantic area. The cores were obtained by SCUBA, gravity cores and DSRV ALVIN. The sediments were sampled with 6 centimeter diameter plastic core liners and ranged in length from 9 to 63 centimeters. Analyses conducted on sediment material include organic carbon, organic nitrogen, percent sand-silt-clay, percent calcium carbonate and pore water concentrations of ammonia, nitrite, nitrate, silicate and phosphate.

1. Northwest Atlantic
2. Sediment cores
3. Pore water nutrients

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